IN THE CLAIMS

We claim:

1. A structure comprising:

a first pair of overlay bars disposed in a substrate and left exposed, said first pair of overlay bars being equidistant from a first centerline;

a second pair of overlay bars disposed in said substrate and left embedded below a layer of material, said second pair of overlay bars being equidistant from a second centerline; and

a third pair of overlay bars disposed in said layer of material, said third pair of overlay bars being equidistant from a third centerline, wherein deviation among said first, second, and third centerlines is a measurement of overlay.

2. The structure of claim 1 wherein a first separation between said first centerline and said third centerline is a post-etch overlay.

3. The structure of claim 1 wherein a second separation between said second centerline and said third centerline is a post-develop overlay.

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- The structure of claim 1 wherein a third separation between said first centerline and said second centerline is an exposed-to-embedded offset in overlay.
- 5. The structure of claim 4 wherein said exposed-to-embedded offset in overlay can correct a post-develop overlay to predict a post-etch overlay.
- 6. The structure of claim 1 wherein said first pair of features comprises trenches filled with dielectric material.
- 7. The structure of claim 1 wherein said second pair of features comprises trenches filled with dielectric material and covered with transparent material.
- 8. The structure of claim 1 wherein said third pair of features comprises said transparent material.

9. The structure of claim 1 wherein/said first pair of features comprises holes filled with a first opaque material.

10. The structure of claim 1 wherein said second pair of features comprises holes filled with said first opaque material and covered with a second opaque material.

11. The structure of claim 1 wherein said third pair of features comprises said second opaque material.

12. The structure of claim 1 wherein said first pair, said second pair, and said third pair of features are parallel.

13. A method comprising:

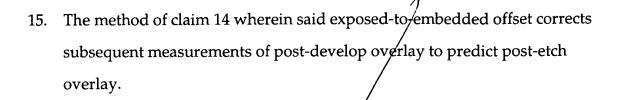
forming a first set and a second set of features in a substrate; covering said first and second set of features with material;

forming a third set of features in said material and removing said material to expose said first set of features, leaving said second set of features embedded below said material;

measuring post-etch overlay between said first set and said third set of features; and

measuring post-develop overlay between said second set and said third set of/features.

14. The method of claim 13 further measuring an exposed-to-embedded offset between said first set and said second set of features.



16. The method of claim 13 wherein said material is transparent.

17. The method of claim 13 wherein said material is opaque.

18. A method comprising:

determining centerline of a first set of features formed in a substrate and not covered with a material;

determining centerline of a second set of features formed in said substrate and covered with said material, said second set and said first set of features being formed together in said substrate;

determining centerline of a third set of features formed in said material;

determining overlay of said third set to said first set of features; and determining overlay of said third set to said second set of features;

19. The method of claim 18 further determining overlay of said first set to said second set of features.

20. The method of claim 18 wherein said centerline is determined optically.